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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/529,690	04/18/2000	ROLAND COX	JYG122USA	3166

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EXAMINER

LEVY, NEIL S

ART UNIT	PAPER NUMBER
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1615

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/529,690

Applicant(s)

COX, ROLAND

Examiner

NEIL LEVY

Art Unit

1615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13,16-18,20,32,35,36 and 38-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13,16-18,20,32,35,36 and 38-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All -b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 1615

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 13, 16-18, 20, 32, 35, 36, 38-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kluft et al WO 97/24484 in view of Barton et al GB 2248774 and/or Lowes 3284395 and or Morrison – 3959556 and/or Cox et al GB 2309461.

Kluft, of record, discloses a covering for beds and similar articles equipped with an acaricidal biocide installed in the covering of mattress protectors and filler materials of cushions and duvets. Kluft is directed principally the problems associated with house dust mites and bed mites and allergies resulting from these as can be seen for page 2-4. In a preferred form (cf. page 5) a biocide is used which exhibits bactericidal, fungicidal and acaricidal activities; the growth of fungi is thus inhibited and with the fungi a possible culture medium for house dust mites. Kluft aims to provide permanent fiber effectiveness (p. 5, paragraph 2). Kluft's fiber (p.3) and (P.6) fungicides are those of the instant invention as claimed; application is not made utilizing the instant wet poly acrylonitrile dope to which is added tolnaftate (p. 10), however. Barton also applies antifungals (p. 4, top) of the instant into fibers of bedding fabric (p. 2) or as a coating. Incorporation into the fiber reduces allergic reactions, and resists removal by Laundering (p. 3, mid page) Barton poses the instant 0.5-5% biocide, as a finely divided particulate applied to the spinning solution of polyacrylonitrile (p. 6 bottom; - mid page 7). Barton is cited to show the instant process, and the equivalence of a coated fiber versus spinning the fiber from a dope with biocide.

Lowes (claim 1) also makes the instant antifungal fiber, to provide long lasting effects to textiles (col. 1, lines 14-22). So does Morrison (col. 2, lines 63-66) to form permanent biocidal fabrics (col. 3, lines 16-20, 35-37) using the instant antifugals (col. 4, top). Fabrics include bed liners, blanket mattress tickings addition to socks (col. 4, lines 39-44).

Cox also, of record, showed the instant method steps, incorporating a fungicide as (p. 2, top) claimed in a dope to produce an acrylic fiber (p. 1, line 5-17), which maintains long lasting efficacy. The fungicide is at 0.001-10% (p. 3, lines 11-14) of the acrylic polymer. In fact, Tolnaftate, at 0.1% (p. 6, top) was found effective. This is that of instant claim 44, thus, inherently it would be effective against *A. glaucus* and *A. restrict* as. Note the yarn spun from these fibers is knitted fabric, and laundered in domestic machines (example 2). Note also, the products so made resist ironing (p. 1, bottom) and are made into those items where mites can be found; textile articles generically, thus, the instant bedding and floor covering – tents; and upholstered materials, awnings (p. 4, lines 13-16).

The primary reference teaches, the essence of the instant invention as claimed, but does not specify the manufacturing process, and every element of the instantly claimed methods. However, the secondary references directed at the same methods and compositions to solve the same problems of the primary reference of provide these additional elements.

Therefore, upon recognition that problems with fungi/house dust mites exist within the filling material of upholstery and bedding materials, it is therefore considered

Art Unit: 1615

an obvious measure which would be undertaken by the person skilled in the art to correspondingly produce these materials with the desired antifungal properties. Thus, the artisan would find it obvious to use particular ingredient combinations, concentration and ratios of ingredients, depending upon the particular fabric material use desired, when shown the Kluft of concern for bed mites to provide an antifungal product, modified by Barton and/or Lowes to increase Longevity over the Kluft coating process, with fiber provided as textiles made into items as desired; socks, bedding as shown by Morrison equally treatable, and by Cox, also treating any textiles with the instant polyacrylonitrile formed with folFnatate into fibers.

It has not clearly been established by objective showing of some additional unusual and/or unexpected results that the administration of the particular form of active, carrier of the particular form or fiber to be treated, provides any greater level of prior art expectation as claimed.

Claims 13, 16, 18, 20, 32, 35, 36, 38-46 are rejected under 35 U.S.C. 102(b) as being anticipated by Cox – GB 23094161 with evidence shown by Kluft – WO 97/24984.

Cox of record, teaches the instant product, textiles (p. 4) made with the instant polyacrylonitrile wet doping with added 0.001-10% to tolnaftate 9p. 2, 3). Although socks are suggested, there is no limit on how the antimicrobial fiber to formed into textile articles is used. One instantly sees textiles as all inclusive of intended since the fiber is that of the instant, inherently its properties are also – it provides antifungal efficacy, and when used in bedding, would not only provide antifungal efficacy, but as Kluft, shows, bedding is an attractive area for bed mites, which are controllable with

Art Unit: 1615


fungicides. Thus if the textile made is bedding, floor covering or upholstered articles, if mites are prevalent, they would necessarily be controlled.

Applicant's arguments filed on 4/12/05 have been fully considered but they are not persuasive. Applicant expected allowance, however, reconsideration and updated search show the inventive process to be old. The claim 13 process can be considered to be met by adding during polymerization, as with functional antimicrobial monomers, or with organic metal biocides. The declaration did not show the amicor biocide used in the Kluft fiber. In any event, Kluft showed superior initial efficacy, but the expected lesser longevity, of a coated rather than impregnated active, as also shown by Barton.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neil Levy whose telephone number is (571) 272-0619. The examiner can normally be reached on Tuesday through Friday 7 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page can be reached on (571) 272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


NEIL S. LEVY
PRIMARY EXAMINER